

## Management Of ITP

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<b>Key Documents Owner:</b>	Dr Kamalarajan/Dawn Forbes	Consultant Paediatrician
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<b>This is the most current version and should be used until a revised document is in place</b>		

### Key Amendments

Date	Amendment	Approved by
19 <sup>TH</sup> Nov 2020	Document extended for 1 year	Dr J West/Paediatric QIM
26 <sup>th</sup> March 2021	Approved with no amendments	Paediatric QIM
9 <sup>th</sup> Feb 24	Approved with no amendments	Paediatric QIM

### Introduction

ITP is characterised by isolated thrombocytopenia. It results from autoimmune destruction of normal platelets in the absence of a known stimulus. It is a diagnosis of exclusion.

Incidence: 4 / 100,000 per year

Prognosis: 9 out of 10 will have improved within a year of initial diagnosis

Primary ITP: Occurs in isolation

Secondary ITP: Occurs with other disorders eg. Autoimmune diseases such as antiphospholipid syndrome & SLE, viral infections including HIV & Hepatitis C, CMV & varicella, side effect of vaccination, side effect of some drugs, lymphoproliferative disorders, common variable immune deficiency

### Details Of Document

This document focusses on the management of Primary ITP

Primary ITP is defined as a platelet count of less than  $100 \times 10^9$  /L in the absence of other causes or disorders that may be associated with thrombocytopenia

### Information to Gather:

History <sup>2</sup> :	Examination <sup>2</sup> :
<ul style="list-style-type: none"> <li>Onset of symptoms</li> </ul>	<ul style="list-style-type: none"> <li>Extent of bleeding/bruising including mucosal bleeding</li> </ul>
<ul style="list-style-type: none"> <li>Systemic symptoms</li> <li>(weight loss, bone pain, night sweats)</li> </ul>	<ul style="list-style-type: none"> <li>Any evidence of acute infection               <ul style="list-style-type: none"> <li>Hepatosplenomegaly</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>Recent viral illness</li> </ul>	<ul style="list-style-type: none"> <li>Lymphadenopathy               <ul style="list-style-type: none"> <li>Limb/joint pain</li> <li>Dysmorphic features</li> </ul> </li> </ul>

• History of recurrent infections • (suggesting immunodeficiency)	
• Recent live virus immunisation	
• Medications	
• Nature of bleeding symptoms	
• Previous bleeding history	
• Co-morbidity that may increase risk of bleeding	
• Risk factors for HIV	
• FH thrombocytopenia or other haematological disorder	
• Lifestyle including sport	

#### **Investigations required in the well child:**

- FBC & Film
- Clotting
- Immunoglobulins
- Bone marrow evaluation is not needed if features typical of ITP<sup>1</sup>

#### **Requirements for diagnosis of Primary ITP <sup>1, 3</sup>:**

**History:** Isolated new onset bleeding symptoms consistent with thrombocytopenia without constitutional symptoms or FH

**Examination:** Bleeding symptoms in the absence of hepatosplenomegaly, lymphadenopathy or signs of congenital conditions

**Investigations:** Isolated thrombocytopenia (Platelets < 100 x 10<sup>9</sup> /L). Anaemia only if significant bleeding. Film should show normal to large platelets; red and white cell morphology should be normal

#### **Classification of Primary ITP <sup>1</sup>**

Newly diagnosed – up to 3 months

Persistent – 3-12 months

Chronic – More than 12 months

#### **Management of Primary ITP**

##### **Principles:**

Aim of treatment is to establish adequate haemostasis not to obtain a normal platelet count <sup>3</sup>

Children with no bleeding or mild bleeding (skin bruising or petechiae only without mucosal bleeding) require observation only<sup>1</sup>

If a child develops epistaxis for 15 min, decision to treat is based on bleeding<sup>1</sup>

Treatment is required for patients with significant bleeding <sup>1</sup> (mucosal bleeding, GI bleeding, intracranial bleeding)

**Management of patients with no or mild bleeding:**

- Can be discharged home
- Counsel parents regarding avoidance of contact sports and to seek medical advice if mucosal or severe bleeding. Avoid aspirin & ibuprofen. Parents to inform medical professionals of diagnosis if surgery or invasive procedures planned
- Written information (Great Ormond Street Hospital ITP information leaflet<sup>4</sup>)
- Open access (until normalisation of platelet count) or refer to Orchard Service
- Follow up in consultant's clinic 4-6 weeks
- Repeat FBC in 1 week in children's clinic. Clinic nurses to liaise with consultant re blood results and plan for further repeats if necessary.

**Management of patients with epistaxis for 15 min:**

- Discuss with consultant regarding need for treatment
- Admit for observation
- At discharge: advice, written information and counselling as for patients with mild or no bleeding
- Open access (until normalisation of platelet count) or refer to Orchard Service
- Follow up in consultant's clinic 4-6 weeks
- Repeat FBC in 1 week in children's clinic. Clinic nurses to liaise with consultant re blood results and plan for further repeats if necessary.

**Management of patients with significant bleeding:**

- Treatment will normally be required. Usual treatment is single dose of Human Normal Immunoglobulin IV Ig (0.8 – 1g/kg) or oral corticosteroids<sup>1</sup>. To be discussed with consultant on call (and likely Haematology consultant at BCH)
- If life threatening bleeding platelet transfusion may be required; discuss with consultant on call (and likely BCH haematology consultant)
- Admit for observation
- At discharge: advice and written information as for patients with mild or no bleeding
- Open access (until normalisation of platelet count) or refer to Orchard Service
- Follow up in consultant's clinic 4-6 weeks
- Repeat FBC within a week of discharge in children's clinic. Clinic nurses to liaise with consultant re blood results and plan for further repeats if necessary.

Note: If a more rapid rise in platelet count is required IV Ig rather than corticosteroids should be used <sup>1</sup>. If immunoglobulin is required there is a form that needs to be completed and sent to Pharmacy in order to obtain it. This form can be obtained from Pharmacy. Ideally this should be done before administration, but in emergencies outside pharmacy opening times it may be completed retrospectively.

## Monitoring and Compliance

This section should identify how the Trusts plan to monitor compliance with and the effectiveness of this Treatment pathway. It should include auditable standards and/or key performance indicators (KPIs) and details on the methods for monitoring compliance.

WHAT?	HOW?	WHO?	WHERE?	WHEN?
<i>These are the 'key' parts of the process that we are relying on to manage risk.</i>	<i>What are we going to do to make sure the key parts of the process we have identified are being followed?</i>	<i>Who is responsible for the check?</i>	<i>Who will receive the monitoring results?</i>	<i>Set achievable frequencies.</i>
BCH will be informed of any proven skin tunnelled Central Venous Catheter infections that are treated within WAHT– they will audit patients cared for in Worcester as part of their Central Venous Line audits for continuity. The audit criteria used by BCH cover all aspects of the Department of Health High Impact Intervention relating to Central Venous Catheter Care (DH 2007)		CLIC Sargent Lead Cancer Nurse for Children and Young People will 'spot check' all staff regularly to ensure compliance with Aseptic Non Touch Technique is maintained.		
BCH will be informed of any proven Implanted Central Venous Access Device infections that are treated within WAHT– they will audit patients cared for within Worcestershire as part of their Central Venous Access Device audits for continuity. The audit criteria used by BCH cover all aspects of the Department of Health High Impact Intervention relating to Central Venous Catheter Care (DH 2007).		CLIC Sargent Lead Cancer Nurse for Children and Young People will 'spot check' all staff regularly to ensure compliance with Aseptic Non Touch Technique is maintained.		

Adherence to management of acute presentation of primary immune thrombocytopenia (ITP) in children pathway	Departmental audit		Paediatric department	
<ul style="list-style-type: none"> <li>Initial courses of chemotherapy will NOT be administered at WRH</li> <li>No nursing staff will administer chemotherapy to children unless they have completed the relevant training</li> <li>Any child/young person with a chemotherapy related extravasation injury will be transferred to BCH immediately</li> </ul>		Lead clinician and lead nurse for the service	Paediatric Clinical Governance Committee	

## References

1. Neunert et al. The American Society of Hematology 2011 evidence-based practice guideline for immune thrombocytopenia. Blood 2011; 117: 16 4190-4207
2. De Mattia et al. Acute childhood idiopathic thrombocytopenic purpura: AIEOP consensus guidelines for diagnosis and treatment
3. American Society of Haematology. 2011 Clinical Practice guideline on the evaluation and management of Immune Thrombocytopenia (ITP) Quick Reference Guide. Adapted from The American Society of Haematology 2011 Evidence Based Practice guideline for immune thrombocytopenia. Cited at <http://www.hematology.org/Practice/Guidelines/2934.aspx>
4. www.gosh.nhs.uk. Idiopathic thrombocytopenic purpura information leaflet. Cited 2/6/13
5. George J et al. Idiopathic Thrombocytopenic Purpura: A Practice Guideline Developed by Explicit Methods for the American Society of Haematology. Blood 1996; 88(1):3-40
6. Provan D et al. International consensus report on the investigation and management of primary immune thrombocytopenia. Blood 2010;115(2):168-186